

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)

)
Amendment of Section 90.239 of the)
Commission's Rules to Adopt Permanent)
Regulations for Automatic Vehicle)
Monitoring Systems)

RM No. 8013

RECEIVED

COMMENTS OF STANFORD TELECOMMUNICATIONS, INC. FEB 22 1993
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

I INTRODUCTION

Stanford Telecommunications, Inc. ("Stanford Telecom"), respectfully submits these comments in the above captioned proceeding. Stanford Telecom is a recognized and proven world leader in communications technologies. Stanford Telecom has over 18 years experience in the development of advanced communications equipment. With over 900 employees nationwide, it has considerable practical and theoretical experience in the field of Spread Spectrum technology. It currently is converting technologies originally developed primarily for defense applications to consumer and commercial uses. Using spread spectrum and digital processing technologies, Stanford Telecom has begun development of wireless data and wireless telephony products.

Stanford Telecom has under development several spread spectrum radio products. These radios are being developed initially under the rules governing spread spectrum in the 902-

928 MHz band¹ which shares the spectrum with several users including the Automatic Vehicle Monitoring ("AVM") systems which operate under interim rules in the private land mobile radio service²

Stanford Telecom believes that the Commission has an incomplete record on the current and future use of this band especially by companies, like Stanford Telecom, that have major Part 15 programs in various stages of development. Therefore, the Commission should issue a Notice of Inquiry (NOI) to ensure that all of the varied interests which share this band have the opportunity to fully develop the record upon which future Commission action could be based.

II DISCUSSION

In this proceeding, PacTel Teletrac requested that the Commission adopt permanent rules which would have the effect of expanding the definition of AVM and thus expand the size scope and ubiquity of AVM systems in the 902-928 MHz band. There is currently a sharing balance among the various users of this band. Expansion of the AVM use of this band will upset this balance and is thus inappropriate at this time without a full understanding of the scope of competing uses. Stanford Telecom, and others, have made a significant investment in wireless technologies relying on the Commission's flexible Part 15 rules.

¹ 47 C.F.R. Section 15.247

² 47 C.F.R. Section 90.239

Action at this time to expand and formalize the Part 90 rules covering AVM's may result in market instability in the 902-928 MHz band and place the marketability of these products in jeopardy.

The balance among various uses will soon be tested by the introduction of several new Part 15 telephony and data products. For example, three major manufacturers of cordless phones have announced, within the last month, plans to market 902-928 MHz cordless phones operating in the 902-928 MHz band. These phones will operate under Commission rules which allow up to one watt of power.³ The liberalized rules which govern these digital spread spectrum phones permit higher power than that authorized for the conventional analog cordless phones.

Analog cordless phones which are extremely low power and subject to interception have, nonetheless, achieved a remarkable acceptance in the marketplace. Approximately 50 million cordless phones have been sold in the last 5 years and 16 million cordless phones were sold in 1992 alone. It is foreseeable that the new digital cordless phones, with greater range and improved privacy, will have similar acceptance in the marketplace. Accordingly, the introduction of these phones will have a major impact on the use of this band.

Similarly, Stanford Telecom and others are adopting digital spread spectrum technology for the business environment. Non-spread spectrum wireless office systems are also under

³ 47 C.F.R. Section 15.247 (b)

development in this band by numerous companies large and small. Our market research reveals that several large companies will be making product announcements in the next few months introducing wireless business phone systems which operate in the 902-928 MHz band.

In view of the fact that there are other systems which provide similar services to those proposed by Teletrac (GPS, Lo-Jack etc.), there does not appear to be a need to act precipitously on the PacTel Petition. Accordingly, premature Commission action in this case (especially in the absence of a complete record) is ill-advised. The public interest would be better served by a thorough evaluation of all facets of the use of this band. Such a thorough examination could best be conducted in the context of an NOI.

In fact, the public interest would be poorly served if millions of consumers and thousands of offices were denied interference-free wireless access because a thorough and complete understanding of the competing uses of this band was not undertaken.

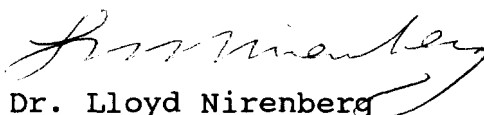
III CONCLUSION

This proceeding is not ripe to move directly to a notice of proposed rulemaking. More information needs to be brought forward to clarify the size of the potential Part 15 equipment market and to clarify the conditions under which AVMs operating under the interim rules of Part 90 and wireless voice and data systems operating under the permissive Part 15 rules will co-exist.

Stanford Telecom urges the Commission to undertake a joint effort between the Office of Engineering and Technology (OET) and the Private Radio Bureau (PRB) -- the two offices responsible for the separate rules (Part 15 and Part 90) -- to examine all facets of the use of the 902-928 MHz band.

A notice of inquiry is the proper procedural step to take in light of the significant lack of information in this proceeding on technology developments under Part 15 rules. An NOI will allow all entities a chance to complete the record and the Commission an opportunity to resolve the tension between competing uses and users of this band.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Lloyd Nirenberg", written in dark ink.

Dr. Lloyd Nirenberg
Director of New Business Development
Stanford Telecommunications. Inc.

February 8, 1993

CERTIFICATE OF SERVICE

I, [fill in name of person who mails copies], hereby
certify that copies of the forgoing comments in RM No. 8013 were
mailed first-class, postage prepaid, to the parties listed on the
attached.

F. J. [unclear]
[Signature]

February (date of mailing), 1993